

Johnson

#8

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/167,516

DATE: 12/30/1999
TIME: 02:38:59

INPUT SET: S34327.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

ENTERED

SEQUENCE LISTING

(1) General Information:

(i) APPLICANT: Cheever, Martin A.
Disis, Mary L.

(ii) TITLE OF INVENTION: COMPOUNDS FOR ELICITING OR ENHANCING IMMUNE
REACTIVITY TO HER-2/neu PROTEIN FOR PREVENTION
OR TREATMENT OF MALIGNANCIES IN WHICH THE HER-2/neu
ONCOGENE IS ASSOCIATED

(iii) NUMBER OF SEQUENCES: 4

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: SEED and BERRY LLP
(B) STREET: 6300 Columbia Center, 701 Fifth Avenue
(C) CITY: Seattle
(D) STATE: Washington
(E) COUNTRY: USA
(F) ZIP: 98104-7092

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/167,516
(B) FILING DATE:
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US/08/625,101
(B) FILING DATE: 01-APR-1996

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Sharkey, Richard G.
(B) REGISTRATION NUMBER: 32,629
(C) REFERENCE/DOCKET NUMBER: 920010.448C7

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (206) 622-4900
(B) TELEFAX: (206) 682-6031

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47
48 (2) INFORMATION FOR SEQ ID NO:1:
49
50 (i) SEQUENCE CHARACTERISTICS:
51 (A) LENGTH: 3768 base pairs
52 (B) TYPE: nucleic acid
53 (C) STRANDEDNESS: single
54 (D) TOPOLOGY: linear
55
56
57
58 (ix) FEATURE:
59 (A) NAME/KEY: CDS
60 (B) LOCATION: 1..3765
61
62
63 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
64
65 ATG GAG CTG GCG GCC TTG TGC CGC TGG GGG CTC CTC CTC GCC CTC TTG 48
66 Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
67 1 5 10 15
68
69 CCC CCC GGA GCC GCG AGC ACC CAA GTG TGC ACC GGC ACA GAC ATG AAG 96
70 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
71 20 25 30
72
73 CTG CGG CTC CCT GCC AGT CCC GAG ACC CAC CTG GAC ATG CTC CGC CAC 144
74 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
75 35 40 45
76
77 CTC TAC CAG GGC TGC CAG GTG GTG CAG GGA AAC CTG GAA CTC ACC TAC 192
78 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
79 50 55 60
80
81 CTG CCC ACC AAT GCC AGC CTG TCC TTC CTG CAG GAT ATC CAG GAG GTG 240
82 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
83 65 70 75 80
84
85 CAG GGC TAC GTG CTC ATC GCT CAC AAC CAA GTG AGG CAG GTC CCA CTG 288
86 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
87 85 90 95
88
89 CAG AGG CTG CGG ATT GTG CGA GGC ACC CAG CTC TTT GAG GAC AAC TAT 336
90 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
91 100 105 110
92
93 GCC CTG GCC GTG CTA GAC AAT GGA GAC CCG CTG AAC AAT ACC ACC CCT 384
94 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
95 115 120 125
96
97 GTC ACA GGG GCC TCC CCA GGA GGC CTG CGG GAG CTG CAG CTT CGA AGC 432
98 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
99 130 135 140

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100																		
101	CTC	ACA	GAG	ATC	TTG	AAA	GGA	GGG	GTC	TTG	ATC	CAG	CGG	AAC	CCC	CAG		480
102	Leu	Thr	Glu	Ile	Leu	Lys	Gly	Gly	Val	Leu	Ile	Gln	Arg	Asn	Pro	Gln		
103	145					150						155				160		
104																		
105	CTC	TGC	TAC	CAG	GAC	ACG	ATT	TTG	TGG	AAG	GAC	ATC	TTC	CAC	AAG	AAC		528
106	Leu	Cys	Tyr	Gln	Asp	Thr	Ile	Leu	Trp	Lys	Asp	Ile	Phe	His	Lys	Asn		
107					165					170					175			
108																		
109	AAC	CAG	CTG	GCT	CTC	ACA	CTG	ATA	GAC	ACC	AAC	CGC	TCT	CGG	GCC	TGC		576
110	Asn	Gln	Leu	Ala	Leu	Thr	Leu	Ile	Asp	Thr	Asn	Arg	Ser	Arg	Ala	Cys		
111				180					185					190				
112																		
113	CAC	CCC	TGT	TCT	CCG	ATG	TGT	AAG	GGC	TCC	CGC	TGC	TGG	GGA	GAG	AGT		624
114	His	Pro	Cys	Ser	Pro	Met	Cys	Lys	Gly	Ser	Arg	Cys	Trp	Gly	Glu	Ser		
115			195					200				205						
116																		
117	TCT	GAG	GAT	TGT	CAG	AGC	CTG	ACG	CGC	ACT	GTC	TGT	GCC	GGT	GGC	TGT		672
118	Ser	Glu	Asp	Cys	Gln	Ser	Leu	Thr	Arg	Thr	Val	Cys	Ala	Gly	Gly	Cys		
119		210					215					220						
120																		
121	GCC	CGC	TGC	AAG	GGG	CCA	CTG	CCC	ACT	GAC	TGC	TGC	CAT	GAG	CAG	TGT		720
122	Ala	Arg	Cys	Lys	Gly	Pro	Leu	Pro	Thr	Asp	Cys	Cys	His	Glu	Gln	Cys		
123	225					230					235					240		
124																		
125	GCT	GCC	GGC	TGC	ACG	GGC	CCC	AAG	CAC	TCT	GAC	TGC	CTG	GCC	TGC	CTC		768
126	Ala	Ala	Gly	Cys	Thr	Gly	Pro	Lys	His	Ser	Asp	Cys	Leu	Ala	Cys	Leu		
127					245					250					255			
128																		
129	CAC	TTC	AAC	CAC	AGT	GGC	ATC	TGT	GAG	CTG	CAC	TGC	CCA	GCC	CTG	GTC		816
130	His	Phe	Asn	His	Ser	Gly	Ile	Cys	Glu	Leu	His	Cys	Pro	Ala	Leu	Val		
131				260					265					270				
132																		
133	ACC	TAC	AAC	ACA	GAC	ACG	TTT	GAG	TCC	ATG	CCC	AAT	CCC	GAG	GGC	CGG		864
134	Thr	Tyr	Asn	Thr	Asp	Thr	Phe	Glu	Ser	Met	Pro	Asn	Pro	Glu	Gly	Arg		
135			275					280					285					
136																		
137	TAT	ACA	TTC	GGC	GCC	AGC	TGT	GTG	ACT	GCC	TGT	CCC	TAC	AAC	TAC	CTT		912
138	Tyr	Thr	Phe	Gly	Ala	Ser	Cys</											

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153	GTG AGG GCA GTT ACC AGT GCC AAT ATC CAG GAG TTT GCT GGC TGC AAG	1104
154	Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys	
155	355 360 365	
156		
157	AAG ATC TTT GGG AGC CTG GCA TTT CTG CCG GAG AGC TTT GAT GGG GAC	1152
158	Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp	
159	370 375 380	
160		
161	CCA GCC TCC AAC ACT GCC CCG CTC CAG CCA GAG CAG CTC CAA GTG TTT	1200
162	Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe	
163	385 390 395 400	
164		
165	GAG ACT CTG GAA GAG ATC ACA GGT TAC CTA TAC ATC TCA GCA TGG CCG	1248
166	Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro	
167	405 410 415	
168		
169	GAC AGC CTG CCT GAC CTC AGC GTC TTC CAG AAC CTG CAA GTA ATC CGG	1296
170	Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg	
171	420 425 430	
172		
173	GGA CGA ATT CTG CAC AAT GGC GCC TAC TCG CTG ACC CTG CAA GGG CTG	1344
174	Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu	
175	435 440 445	
176		
177	GGC ATC AGC TGG CTG GGG CTG CGC TCA CTG AGG GAA CTG GGC AGT GGA	1392
178	Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly	
179	450 455 460	
180		
181	CTG GCC CTC ATC CAC CAT AAC ACC CAC CTC TGC TTC GTG CAC ACG GTG	1440
182	Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val	
183	465 470 475 480	
184		
185	CCC TGG GAC CAG CTC TTT CGG AAC CCG CAC CAA GCT CTG CTC CAC ACT	1488
186	Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr	
187	485 490 495	
188		
189	GCC AAC CGG CCA GAG GAC GAG TGT GTG GGC GAG GGC CTG GCC TGC CAC	1536
190	Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His	
191	500 505 510	
192		
193	CAG CTG TGC GCC CGA GGG CAC TGC TGG GGT CCA GGG CCC ACC CAG TGT	1584
194	Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys	
195	515 520 525	
196		
197	GTC AAC TGC AGC CAG TTC CTT CGG GGC CAG GAG TGC GTG GAG GAA TGC	1632
198	Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys	
199	530 535 540	
200		
201	CGA GTA CTG CAG GGG CTC CCC AGG GAG TAT GTG AAT GCC AGG CAC TGT	1680
202	Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys	
203	545 550 555 560	
204		
205	TTG CCG TGC CAC CCT GAG TGT CAG CCC CAG AAT GGC TCA GTG ACC TGT	1728

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206	Leu	Pro	Cys	His	Pro	Glu	Cys	Gln	Pro	Gln	Asn	Gly	Ser	Val	Thr	Cys	
207					565					570						575	
208																	
209	TTT	GGA	CCG	GAG	GCT	GAC	CAG	TGT	GTG	GCC	TGT	GCC	CAC	TAT	AAG	GAC	1776
210	Phe	Gly	Pro	Glu	Ala	Asp	Gln	Cys	Val	Ala	Cys	Ala	His	Tyr	Lys	Asp	
211				580					585					590			
212																	
213	CCT	CCC	TTC	TGC	GTG	GCC	CGC	TGC	CCC	AGC	GGT	GTG	AAA	CCT	GAC	CTC	1824
214	Pro	Pro	Phe	Cys	Val	Ala	Arg	Cys	Pro	Ser	Gly	Val	Lys	Pro	Asp	Leu	
215			595					600					605				
216																	
217	TCC	TAC	ATG	CCC	ATC	TGG	AAG	TTT	CCA	GAT	GAG	GAG	GGC	GCA	TGC	CAG	1872
218	Ser	Tyr	Met	Pro	Ile	Trp	Lys	Phe	Pro	Asp	Glu	Glu	Gly	Ala	Cys	Gln	
219		610					615					620					
220																	
221	CCT	TGC	CCC	ATC	AAC	TGC	ACC	CAC	TCC	TGT	GTG	GAC	CTG	GAT	GAC	AAG	1920
222	Pro	Cys	Pro	Ile	Asn	Cys	Thr	His	Ser	Cys	Val	Asp	Leu	Asp	Asp	Lys	
223	625					630					635					640	
224																	
225	GGC	TGC	CCC	GCC	GAG	CAG	AGA	GCC	AGC	CCT	CTG	ACG	TCC	ATC	ATC	TCT	1968
226	Gly	Cys	Pro	Ala	Glu	Gln	Arg	Ala	Ser	Pro	Leu	Thr	Ser	Ile	Ile	Ser	
227					645					650						655	
228																	
229	GCG	GTG	GTT	GGC	ATT	CTG	CTG	GTC	GTG	GTC	TTG	GGG	GTG	GTC	TTT	GGG	2016
230	Ala	Val	Val	Gly	Ile	Leu	Leu	Val	Val	Val	Leu	Gly	Val	Val	Phe	Gly	
231				660					665					670			
232																	
233	ATC	CTC	ATC	AAG	CGA	CGG	CAG	CAG	AAG	ATC	CGG	AAG	TAC	ACG	ATG	CGG	2064
234	Ile	Leu	Ile	Lys	Arg	Arg	Gln	Gln	Lys	Ile	Arg	Lys	Tyr	Thr	Met	Arg	
235			675					680					685				
236																	
237	AGA	CTG	CTG	CAG	GAA	ACG	GAG	CTG	GTG	GAG	CCG	CTG	ACA	CCT	AGC	GGA	2112
238	Arg	Leu	Leu	Gln	Glu	Thr	Glu	Leu	Val	Glu	Pro	Leu	Thr	Pro	Ser	Gly	
239		690					695					700					
240																	
241	GCG	ATG	CCC	AAC	CAG	GCG	CAG	ATG	CGG	ATC	CTG	AAA	GAG	ACG	GAG	CTG	2160
242	Ala	Met	Pro	Asn	Gln	Ala	Gln	Met	Arg	Ile	Leu	Lys	Glu	Thr	Glu	Leu	
243	705					710					715					720	
244																	
245	AGG	AAG	GTG	AAG	GTG	CTT	GGA	TCT	GGC	GCT	TTT	GGC	ACA	GTC	TAC	AAG	2208
246	Arg	Lys	Val	Lys	Val	Leu	Gly	Ser	Gly	Ala	Phe	Gly	Thr	Val	Tyr	Lys	
247					725					730						735	
248																	
249	GGC	ATC	TGG	ATC	CCT	GAT	GGG	GAG	AAT	GTG	AAA	ATT	CCA	GTG	GCC	ATC	2256
250	Gly	Ile	Trp	Ile	Pro	Asp	Gly	Glu	Asn	Val	Lys	Ile	Pro	Val	Ala	Ile	
251				740					745					750			
252																	
253	AAA	GTG	TTG	AGG	GAA	AAC	ACA	TCC	CCC	AAA	GCC	AAC	AAA	GAA	ATC	TTA	2304
254	Lys	Val	Leu	Arg	Glu	Asn	Thr	Ser	Pro	Lys	Ala	Asn	Lys	Glu	Ile	Leu	
255			755					760					765				
256																	
257	GAC	GAA	GCA	TAC	GTG	ATG	GCT	GGT	GTG	GGC	TCC	CCA	TAT	GTC	TCC	CGC	2352
258	Asp	Glu	Ala	Tyr	Val	Met	Ala	Gly	Val	Gly	Ser	Pro	Tyr	Val	Ser	Arg	

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